

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
 (Not for submission under 37 CFR 1.99)

Application Number	10789311
Filing Date	2004-02-27
First Named Inventor	Hans Eberle
Art Unit	2136
Examiner Name	Johnson, Carlton
Attorney Docket Number	6000-31500

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/CJ/	3	20040158597			Ye, et al.	
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/CJ/	1	U.S. Application Serial No. 10/387,007 entitled "Hardware Accelerator for Elliptic Curve Cryptography". March 2009	<input type="checkbox"/>
	2	U.S. Application Serial No. 10/387,008 entitled "Generic Modular Multiplier Using Partial Reduction". February 2008	<input type="checkbox"/>
↓	3	U.S. Application Serial No. 10/387,009 entitled "Modular Multiplier". November 2008	<input type="checkbox"/>

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/CJ/	4	U.S. Application Serial No. 10/387,104 entitled "Generic Implementation of Elliptic Curve Cryptography Using Partial Reduction". June 2007	<input type="checkbox"/>
	5	ERDEM, et al., "A Less Recursive Variant of Karatsuba-Ofman Algorithm for Multiplying Operands of Size a Power of Two," Proceedings of the 16th IEEE Symposium on Computer Arithmetic (ARITH-16'03), June 15-18, 2003.	<input type="checkbox"/>
	6	Gupta, V., et al. "Speeding up Secure Web Transactions Using Elliptic Curve Cryptography." Sun Microsystems, Inc., http://research.sun.com/projects/crypto/ , 9 pages. February 2004	<input type="checkbox"/>
	7	Comba, P.G., "Exponentiation Cryptosystems on the IBM PC," IBM Systems Journal, Vol. 29, No. 4, 1990, pp. 526-538.	<input type="checkbox"/>
	8	Kaliski, Burt, "TWIRL and RSA Key Size," Technical Notes, May 1, 2003, RSA Laboratories, 5 pages, downloaded from Internet http://www.ornasecurity.com/rslabs/node.asp?id=2004 as of September 13, 2006.	<input type="checkbox"/>
	9	Gura, Nis, et al., "Comparing Elliptic Curve Cryptographic and RSA on 8-bit CPUs," Cryptographic Hardware and Embedded Systems – CHES 2004: 6th International Workshop (Cambridge, MA, USA), August 11-13, 2004, LNCS, Vol. 3156, ISBN 3-540-22666-4, pp. 119-132, Springer.	<input type="checkbox"/>
	10	Hasegawa, et al., "A Practical Implementation of Elliptic Curve Cryptosystems over GF(p) on a 16-Bit Microcomputer," In Public Key Cryptography PKC, '98, Vol. 1431 of Lecture Notes in Computer Science. February 1998	<input type="checkbox"/>
	11	Karatsuba, A., et al., "Ymnozhenie mnogozhachix chisel na avtomatax," Doklady Akademii Nauk SSSR, Vo. 145, No. 2, pp. 293-294, 1962.	<input type="checkbox"/>
	12	Hankerson, et al., "Guide to Elliptic Curve Cryptography," pp. 48-53, 95-113, 129-147, 205-212 and 224-226, Springer-Verlag, 2004.	<input type="checkbox"/>
	13	Guajardo, et al., "Efficient Algorithms for Elliptic Curve Cryptosystems," ECE Dept., Worcester Polytechnic Institute, pp. 1-16 (CRYPTO '97, Springer-Verlag, LNCS 1294, pp. 342-356, 1997).	<input type="checkbox"/>
↓	14	Weimerskirch, et al., "Generalizations of the Karatsuba Algorithm for Polynomial Multiplication," Communication Security Group, Dept. of Electrical Engineering & Information Sciences, Ruhr-Universitat, Germany, March 2002, pp. 1-23.	<input type="checkbox"/>

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/CJ/	15	Blake-Wilson, S., "Additional ECC Groups for IKE", IPsec Blake-Wilson, Dierks, Hawk-Working Group, July 23, 2002, pp. 1-17.	<input type="checkbox"/>
	16	Gupta, V., "ECC Cipher Suites for TLS," Blake-Wilson, Dierks, Hawk – TLS Working Group, August 2002, pp. 1-31.	<input type="checkbox"/>
	17	Standards for Efficient Cryptography, "SEC 2: Recommended Elliptic Curve Domain Parameters," Certicom Research, September 20, 2000, pp. i-45.	<input type="checkbox"/>
	18	"RFC 2246 on the TLS Protocol Version 1.0", http://www.ietf.org/mail-archive/ietf-announce/Current/msg02896.html , March 26, 2003, 2 pages, including Dierks, T., "The TLS Protocol Version 1.0", Dierks & Allen, January 1999. pp. 1-80.	<input type="checkbox"/>
	19	Song, et al., "Low-Energy Digit-Serial/Parallel Finite Field Multipliers," Journal of VLSI Signal Processing 19, 1998, pp. 149-166.	<input type="checkbox"/>
	20	Agnew, et al., "An Implementaion of Elliptic Curve Cryptosystems Over F2155," IEEE Journal on Selected Areas on Communications, Vol. 11. No. 5, June1993, pp. 804-813.	<input type="checkbox"/>
	21	Halbutogullari, et al., "Mastrovito Multiplier for General Irreducible Polynomials," IEEE Transactions on Computers, Vo. 49, No. 5, May 2000, pp. 503-518.	<input type="checkbox"/>
	22	Yanik, et al., "Incomplete Reduction in Modular Arithmetic," IEEE Proc.-Comput. Digit. Tech., Vol. 149, No. 2, March 2002, pp. 46-52.	<input type="checkbox"/>
	23	Blum, et al., "High-Radix Montgomery Modular Exponentiation on Reconfigurable Hardware," IEEE Transactions on Computers, Vol. 50, No. 7, July 2001, pp. 759-764.	<input type="checkbox"/>
	24	Gao, et al., "A Compact Fast Variable Key Size Elliptic Curve Cryptosystem Coprocessor," Proceedings of the Seventh Annual IEEE Symposium on Field-Programmable Custom Computer Machines, 1998.	<input type="checkbox"/>
	25	Ernst, et al., "Rapid Prototyping for Hardware Accelerated Elliptic Curve Public-Key Cryptosystems," 12th IEEE Workshop on Rapid System Prototyping, Monterey, CA June 2001, pp. 24-29.	<input type="checkbox"/>

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/C,i/	26	Orlando, et al., August 2000, "A High-Performance Reconfigurable Elliptic Curve Processor for GF(2 ^m)," CHES 2000 Workshop on Cryptographic Hardware and Embedded Systems, Springer-Verlag, Lecture Notes in Computer Science, 1965, pp. 41-56.	<input type="checkbox"/>
	27	Lopez, et al., August 1999, "Fast Multiplication on Elliptic Curves over GF(2 ^m) without Precomputation," CHES 1999 Workshop on Cryptographic Hardware and Embedded Systems, Springer-Verlag, Lecture Notes in Computer Science, 1717, pp. 316-327.	<input type="checkbox"/>
	28	Hankerson, et al., August 2000, "Sovareinmentaion of Elliptic Curve Cryptography over Binary Fields," CHES 2000 Workshop on Cryptographic Hardware and Embedded Systems, Springer-Verlag, Lecture Notes in Computer Science, 1965, pp. 1-24.	<input type="checkbox"/>
	29	Koblitz, Neal, "Elliptic Curve Cryptosystems," Mathematics of Computation, Vo. 48, NO. 177, January 1987, pp. 203-209.	<input type="checkbox"/>
	30	Schroeppel, et al., 1995, "Fast Key Exchange with Elliptic Curve Systems," Advances in Cryptography, Crypto '95, Springer-Verlag, Lecture Notes in Computer Science 963, pp. 43-56.	<input type="checkbox"/>
	31	Woodbury, et al., September 2000, "Elliptic Curve Cryptography on Smart Cards Without Coprocessors," The Fourth Smart Card Research and Advanced Applications (CARDIS2000) Conference, Bristol, UK, pp. 71-92.	<input type="checkbox"/>
	32	Miller, V., "Use of Elliptic Curves of Cryptography," In Lecture Notes in Computer Science 218, Advances in Cryptology, CRYPTO '85, pp. 417-426, Springer-Verlag, Berling, 1986.	<input type="checkbox"/>
	33	Itoh, et al., "A Fast Algorithm for Computer Multiplicative Inverses in GF(2 ^m) Using Normal Bases," Information and Computation, Vol. 78, NO. 3, 1988, pp. 171-177.	<input type="checkbox"/>
	34	Bednara, et al., "Reconfigurable Implementation of Elliptic Curve Crypto Algorithms," Proceedings of the International Parallel and Distributed Processing Symposium, IEEE Computer Society, 2002, 8 pages.	<input type="checkbox"/>
	35	U.S. Dept. of Commerce/National Institute of Standards and Technology, "Digital Signature Standard (DSS)," Federal Information Processing Standards Publication, January 27, 2000, pp. 1-74.	<input type="checkbox"/>
↓	36	Blake-Wilson, et al, "ECC Cipher Suites for TLS," Blake-Wilson, Dierks, Hawk—TLS Working Group, March 15, 2001, pp. 1-22.	<input type="checkbox"/>

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/CJ/	37	Goodman, et al., "An Energy-Efficient Reconfigurable Public-Key Cryptography Processor," IEEE Journal of Solid-State Circuits, Vol. 36, No. 11, November 2001, pp. 1808-1820.	<input type="checkbox"/>
/CJ/	38	Shantz, Sheueling Chang, "From Euclid's GCD to Montgomery Multiplication to the Great Divide," Sun Microsystems, June 2001, pp. 1-10.	<input type="checkbox"/>
/CJ/	39	Blake, et al., "Elliptic Curves in Cryptography," London Mathematical Society Lecture Note Series 265, Cambridge University Press, UK, 1999, pp. vii-204.	<input type="checkbox"/>

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